



# RADIATION THERAPY for **SKIN CANCER**



**Facts to Help Patients Make an  
Informed Decision**

# ASTRO

**THE AMERICAN SOCIETY FOR THERAPEUTIC  
RADIOLOGY AND ONCOLOGY**

*Targeting Cancer Care*

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## FACTS ABOUT SKIN CANCER

- The skin is the body's largest organ. Its job is to protect internal organs against damage, heat and infection. The skin is also the most exposed organ to sunlight and other forms of harmful ultraviolet rays.
- More than 1 million cases of basal and squamous cell skin cancers will be diagnosed in the United States this year. These cancers can usually be cured.
- 65,000 cases of melanoma will be diagnosed this year. More than 7,000 men and 3,710 women will die from the disease this year.
- Melanoma is 10 times more common among Caucasians than in African-Americans.

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## HELPFUL WEB SITES ON SKIN CANCER

### **Melanoma Research Foundation**

[www.melanoma.org](http://www.melanoma.org)

### **People Living with Cancer**

[www.plwc.org](http://www.plwc.org)

### **Skin Cancer Foundation**

[www.skincancer.org](http://www.skincancer.org)



## TREATING SKIN CANCER

**The treatment you receive depends on several factors, including your overall health, the stage of the disease and whether the cancer has spread to other parts of your body. Treatments are often combined and can include the following:**

- **Radiation therapy** is where the cancer cells are killed by X-rays.
- **Surgery** is where the cancer cells are cut out and removed.
- **Moh's surgery**, which is a microscopic surgery, allows surgeons to remove tiny cancerous tissue while preserving healthy tissue.
- **Cryosurgery** is where the cancer is frozen and removed.
- **Laser surgery** is where the cancer cells are killed by laser beams.
- **Electrodesiccation** is where the cancer is dried with an electric current and removed.
- **Chemotherapy** is where the cancer cells are attacked by a drug that is either taken internally or applied on the skin.
- **Biologic therapy** is where doctors help your immune system better fight the cancer.
- **Photodynamic therapy** is when the cancer is treated with a drug that is very sensitive to a special kind of light. When exposed to that special light, the drug produces a chemical reaction that kills nearby cells.

## TYPES OF SKIN CANCER

- **Basal cell carcinoma:** This is the most common form of skin cancer, and it is very curable. These cancers begin in the outer layer of skin (**epidermis**). Radiation therapy is very effective for treating basal cell cancers that have not spread elsewhere. Other common treatments include surgery, chemotherapy and cryosurgery.
- **Squamous cell carcinoma:** This is the second most common type of skin cancer. These cancers also begin in the epidermis. Radiation therapy can be used to treat squamous cell cancers that start on the skin and sometimes nearby lymph nodes with or without surgery. Other common treatments include surgery, chemotherapy, cryotherapy and photodynamic therapy.
- **Melanoma:** This is the most serious skin cancer; it begins in skin cells called **melanocytes** that produce skin color (**melanin**). Radiation therapy is used mostly for melanomas that started in another part of the body (**metastases**). It is used to treat areas where doctors think the disease may spread, such as lymph nodes in the head or neck area.

Melanoma is usually treated first with surgery and may be followed by chemotherapy, radiation therapy and biologic therapy.



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## UNDERSTANDING RADIATION THERAPY

**Radiation therapy, also called radiotherapy, is the careful use of radiation to treat many different kinds of cancer.**

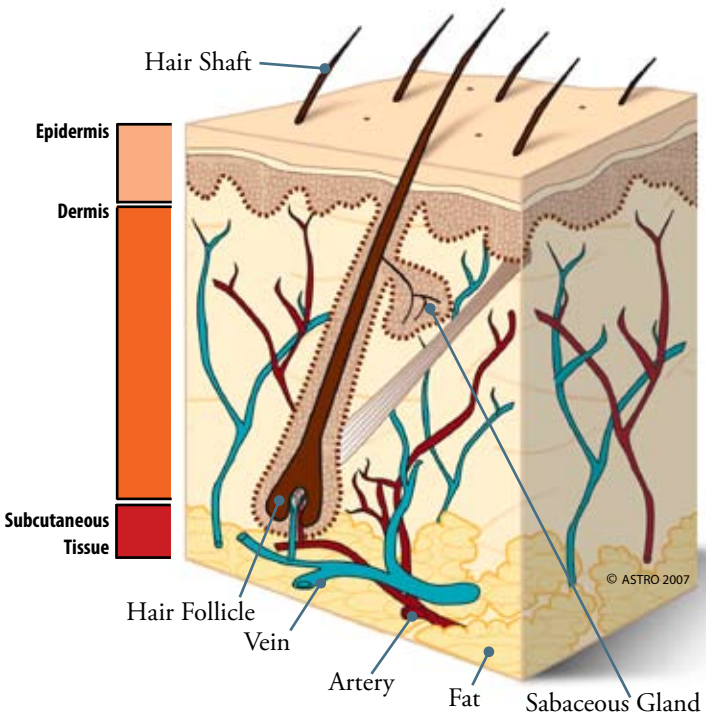
- Cancer doctors, called **radiation oncologists**, use radiation therapy to try to cure cancer, to control cancer growth or to relieve symptoms such as pain.
- Radiation therapy works within cancer cells by damaging their ability to multiply. When these cells die, the body naturally eliminates them.
- Healthy cells that grow and divide quickly are also harmed by radiation, but they are able to repair themselves in a way that cancer cells cannot.

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## EXTERNAL BEAM RADIATION THERAPY

**External beam radiation therapy may be used to treat skin cancer itself or to relieve pain from cancer that has spread.**

- Radiation oncologists deliver external beam radiation therapy to the cancer from a machine outside your body.
- Skin cancer is often treated with **superficial** forms of radiation. That means the radiation only penetrates only a short distance below the surface.
- Doctors target the radiation beams at your tumor, giving more radiation to the skin cancer while keeping it away from underlying organs.
- Treatments are usually scheduled every day, Monday through Friday, for several weeks to accurately deliver radiation to the cancer.
- Treatments are painless and take less than half an hour each, start to finish.
- Your treatment schedule will depend on your cancer, but it usually requires daily treatments for one or more weeks.
- Radiation therapy is often given in addition to **surgery, chemotherapy** or **biologic therapy**.



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## POTENTIAL SIDE EFFECTS

**The side effects you might feel will depend on the part of your body being treated, the dose of radiation given and whether you also receive other treatments like chemotherapy. Before treatment begins, ask your doctor about possible side effects and how you can best manage them.**

- Nearly all patients will experience redness and moistness of the skin, similar to a brisk sunburn. After treatment ends, the skin will form a protective scab and the new, healthy skin will develop underneath it. This healing may take several months.
- You will also likely lose your hair in the area treated. Your hair may grow back, but it might not have the same texture or thickness.

Talk to your doctor or nurse about any discomfort you feel. He or she may be able to provide drugs or other treatments to help.

## CARING FOR YOURSELF DURING TREATMENT

- Get plenty of rest during treatment.
- Follow your doctor's orders. Ask if you are unsure about anything or if you have questions about your treatments and side effects.
- Tell your doctor about any medications or vitamins you are taking, to make sure if they're safe to use during radiation therapy.
- Eat a balanced diet. If food tastes funny or you're having trouble eating, tell your doctor or dietician. They may be able to help you change the way you eat.
- Treat the skin exposed to radiation with special care. Stay out of the sun, avoid hot or cold packs, and only use lotions and ointments after checking with your doctor or nurse. When cleaning the area, use only water and a mild soap.
- Battling cancer is tough. Don't be afraid to ask friends, family, support groups and your radiation oncology team for help.



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## LEARNING ABOUT CLINICAL TRIALS

The radiation oncology treatment team is constantly exploring new ways to treat cancer through studies called **clinical trials**. Today's standard radiation therapy treatments are the result of clinical trials completed years ago. For more information on clinical trials, ask your doctor or visit:

**National Cancer Institute**  
[www.cancer.gov/clinicaltrials](http://www.cancer.gov/clinicaltrials)

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## ABOUT THE RADIATION ONCOLOGY TEAM

**Radiation oncologists** are the doctors who oversee the care of each person undergoing radiation treatment. Other members of the treatment team include radiation therapists, radiation oncology nurses, medical physicists, dosimetrists, social workers and nutritionists. For information on what each of these professionals does or to locate a radiation oncologist near you, visit [www.rtanswers.org](http://www.rtanswers.org).

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## ABOUT ASTRO

The American Society for Therapeutic Radiology and Oncology is the largest radiation oncology society in the world with 9,000 members who specialize in treating cancer with radiation therapies. ASTRO is dedicated to improving patient care through education, clinical practice, advancement of science and advocacy.